Special Issue

Modelling of Damage and Fracture in Materials and Structures

Message from the Guest Editors

More and more advanced materials and structures with sophisticated microstructures and functional features have been introduced in recent years due to the rapid development of advanced manufacturing technology. Applications of these advanced materials and structures are diverse, including those in aerospace, shipbuilding, automotive, environment, energy and biomedical engineering and many other industries. As vital components, the failure of advanced materials and structures leads to catastrophic consequences for their applications. This Special Issue aims to provide a platform through which to showcase the most recent developments in modelling the damage and fracture of advanced materials and structures under various physical conditions. Research into the fracture and damage behavior of functionally graded materials, metamaterials and biomaterials under thermal, mechanical, electromagnetic and chemical loading is particularly welcome in this Special Issue. Fabrication and characterization of the deformation and failure of advanced materials and structures are also of particular interest.

Guest Editors

Prof. Dr. Zengtao Chen
Department of Mechanical Engineering, University of Alberta, Edmonton, AB T6G 1H9, Canada

Dr. Jiye Chen
Faculty of Technology, University of Portsmouth, Portsmouth PO1 3AH, UK

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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